



DELAWARE COUNTY REGIONAL WATER QUALITY CONTROL AUTHORITY
P.O. Box 999 • Chester, PA 19016-0999

April 14, 2016

FED EX – NEXT DAY

Chief, Environmental Enforcement
Section
Environment and Natural
Resources Division
U.S. Department of Justice
601 D Street NW
Washington, DC 20004

Philip Yeany
Office of Regional Counsel (3RC20)
U.S. EPA, Region 3
1650 Arch Street
Philadelphia, PA 19103-2029

Chief
NPDES Enforcement Branch (3WP42)
Water Protection Division
U.S. EPA, Region 3
1650 Arch Street
Philadelphia, PA 19103-2029

Program Manager – Clean Water Program
PA DEP
Southeast Regional Office
2 East Main Street
Norristown, PA 19401

RE: Civil Action Number Case 2:15-cv-04652-RB
& DOJ Case Number 90-5-1-1-10972
Public Participation Plan Report (Updated April 2016)

Dear Sir/Madam:

By this letter, the Delaware County Regional Water Quality Control Authority is enclosing an updated copy of the above mentioned report in response to comments noted in the USEPA letter dated February 18, 2016.

If there are any questions, please contact me. Thank you.

Sincerely,

Michael J. DiSantis
Director of Operations & Maintenance

MJD:bab
enclosure

ADMINISTRATION

☐ 610-876-5523
☐ FAX: 610-876-2728

CUSTOMER SERVICE/BILLING

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☐ FAX: 610-876-1460

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PLANT & MAINTENANCE

☐ 610-876-5523
☐ FAX: 610-497-7950



Delaware County Regional Water Quality Control Authority (DELCORA)
CSO Long Term Control Plan Update

PUBLIC PARTICIPATION PLAN *(Final)*

October 2015
(Updated April 2016)



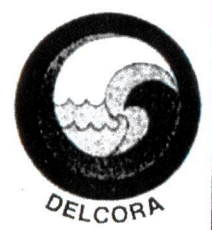
GREELEY AND HANSEN

- ✓ **Look for and check your sewer cleanout.** The cleanout usually is a small pipe, about 4 inches in diameter, outside your house or business that is used to access the service lateral for cleaning the sewer line. You can find it near the house, where the service lateral comes out, and/or near the street, where the service lateral connects to the main sewer line. Make sure the cap to the cleanout pipe is on and has not been damaged by a lawn mower or something else. Replace missing caps; otherwise, rain can get into the sewer line, causing it to overflow.
- ✓ **Avoid pouring grease down your sink.** When the grease cools in the sewer line, it can form clogs and blockages, which then can cause the sewer to overflow or back up into buildings. The grease also can contribute to restricted flow in your home plumbing and service laterals, resulting in costly repairs.
- ✓ **Avoid planting trees and shrubs above or near the service lateral** that runs from your building to the street. Roots can enter and clog sewers, causing them to back up and overflow.
- ✓ **Learn about your local sewer system.** Contact your local sewer authority or department of public works, and ask them to describe how the system works. Ask for the general location of the main sewer lines and treatment plant(s) and what type of monitoring is being conducted to detect SSOs.
- ✓ **Support local programs that aim to improve the way your sanitary sewer system is maintained and operated.** Proper operation and maintenance of the sanitary sewer system are key to preventing the damage caused by SSOs and prolong the life of the sewer system, saving taxpayer dollars.

This brochure is provided by Citizens Environmental Research Institute and funded by the U.S. Environmental Protection Agency, Cooperative Agreement Assistance I.D. No. CX824853-01. For more information about SSO's contact:

Citizens Environmental Research Institute
225 Main Street, Suite 2
Farmingdale, NY 11735
Web site: <http://www.ceriworld.org>
516-390-7150 Fax: 610-516-390-7160

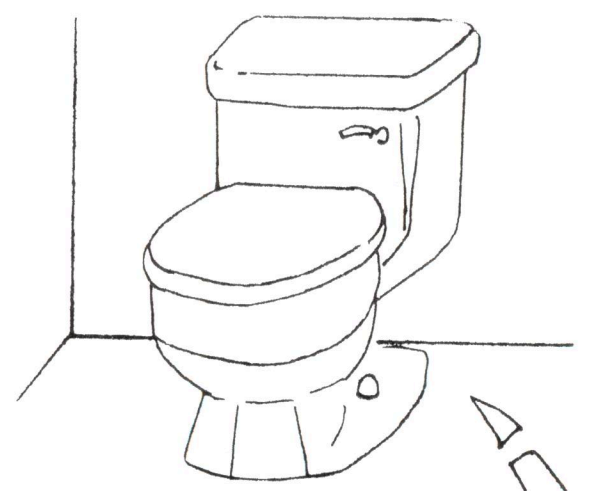
DELCORA
100 East Fifth Street, P.O. Box 999
Chester, PA 19016-5523
Web site: <http://www.DELCORA.org>
610-876-5523 Fax: 610-876-2728



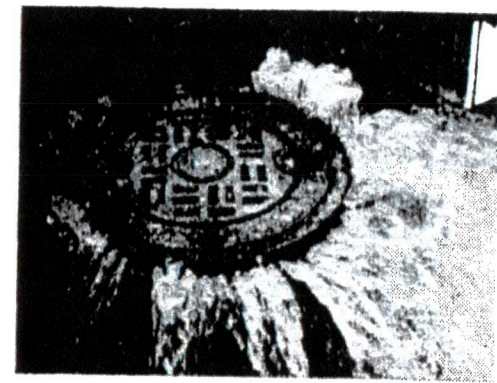
TOP SEVEN TERMS FOR BETTER UNDERSTANDING SSOs:

1. **INFILTRATION.** The water entering a sanitary sewer system through pipe joints, line breaks or cracks.
2. **INFLOW.** Rainwater from roofs, pavements, yards, manholes, and manhole covers that flows directly into a sanitary sewer.
3. **SERVICE LATERAL.** The sewer pipe that connects a house or other building to the main sewer line in the street.
4. **SEWER CLEANOUT.** A small pipe with a cap, located near the place in a house or other building where the service lateral enters. The cleanout is used to free blockages that may form in the service lateral.
5. **PATHOGENS.** Organisms in raw sewage that cause diseases, including cholera, dysentery, hepatitis, and gastroenteritis.
6. **MANHOLE & MANHOLE COVER.** A structure, usually found in a street, parking area, or sidewalk, that is used to provide access to the main underground sewer lines.
7. **COLLECTION SYSTEM.** The series of progressively larger pipes through which sewage is carried from homes and businesses to a treatment plant. The collection system includes service laterals and the main sewer lines.

SANITARY SEWER OVERFLOWS



*What are they?
Why are they a problem?
What can we do about them?*



A Citizens Guide

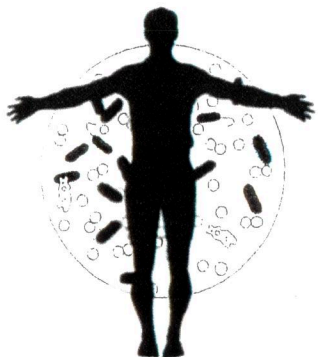
What is a Separate Sanitary Sewer and what is its purpose?

A *Separate Sanitary Sewer* collects and carries household and industrial sewage from individual buildings such as homes and commercial businesses through a series of progressively larger sewer pipes called the *collection system*. A *separate* sanitary sewer system is different from a *combined* system, which carries sewage and storm water runoff together. Separate sanitary sewer systems are not designed to carry rain water.

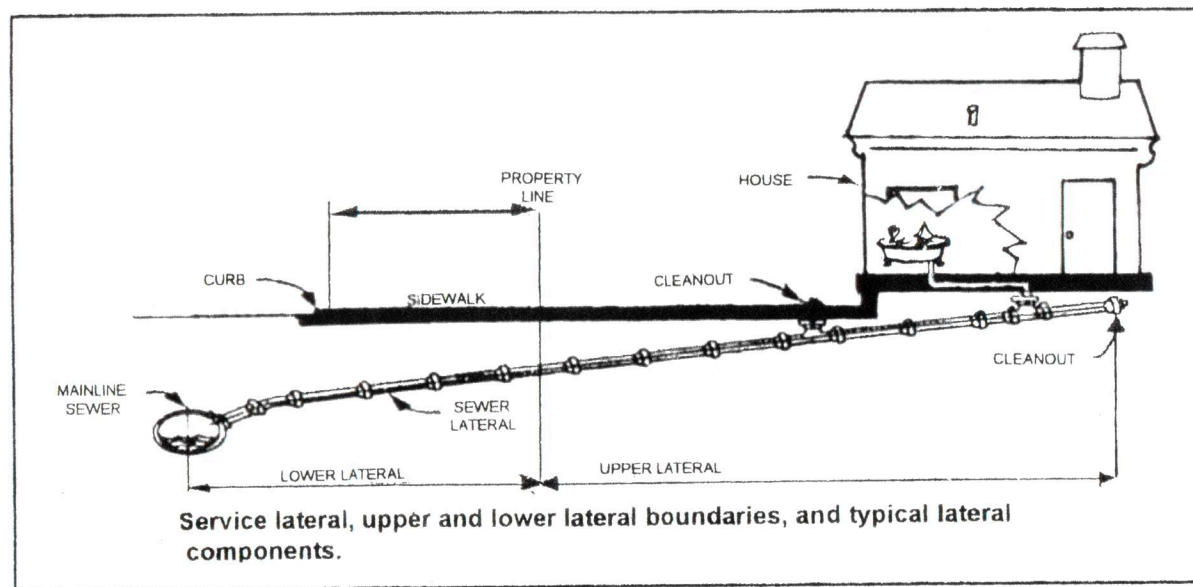
The *primary purpose* of a separate sanitary sewer is to *protect public health and the environment*. Raw sewage contains disease-causing organisms, which can make people sick if they become directly exposed. Raw sewage also can contain toxic chemicals and offensive odors. The sanitary sewer system carries the raw sewage away from homes and businesses to a treatment plant, where most of the harmful organisms are destroyed, odors are controlled, and the level of toxic chemicals is reduced.

Why are Sanitary Sewer Overflows a public health, environmental and economic problem?

Sanitary Sewer Overflows (SSOs) occur when raw or partially diluted sewage is discharged from a sewer collection system before it reaches the sewage treatment plant. SSOs threaten public health because they can cause people to be directly exposed to disease-causing germs called *pathogens*, such as *E. coli* and *Cryptosporidium*, which are present in sewage. SSOs also can have negative impacts on the natural environment, causing poor water quality in lakes, rivers and streams, and polluting groundwater, which may be used for drinking water purposes. SSOs can cause economic damage as well, hurting water-dependent businesses,



such as commercial fishing and tourism. SSOs that result in basement flooding not only are unhealthy, but also are extremely unpleasant and costly to clean up. Where these chronically occur, property values may be reduced.



United States Environmental Protection Agency, Seminar Publication, National Conference on Sanitary Sewer Overflows, April 24-26, 1995, Washington, D.C.

How might you be contributing to the problem of SSOs?

Many property owners are not aware that the maintenance of the sewer line connection between a home or a business (i.e. "upper lateral" in figure) and the main sewer line in the street usually is their responsibility. When poorly constructed or improperly maintained, these connections, called *service laterals*, frequently cause raw sewage to back up in basements.

The connection of roof-gutter downspouts or sump-pump drains directly to the service lateral adds excess water to the main sewer lines, and can contribute to raw sewage being discharged into the streets (SSO) and other public areas. Homes and small businesses, such as restaurants, can contribute to SSOs by disposing grease into the sewer line. When grease cools, it can form blockages, which then cause the sewer to overflow.

What should you do when you identify an SSO?

Make sure that people are kept away from the area of the overflow, typically a *manhole* cover. This is especially important for children and pets who may play

near the overflow area (e.g. street, public park, or local stream). Report the sewer overflow immediately to the local health department, the sewer operator, and the state environmental agency. Precautions then can be taken by them to reduce the risk of public exposure to raw sewage by monitoring the impact of the overflow and ensuring proper cleanup.

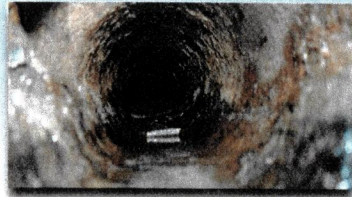
What can you do to prevent and reduce SSOs?

You can prevent and reduce SSOs if you:

- ✓ **Make sure the basement sump pump does not connect to your sewage drain pipes or to a sink or floor drain in your basement.** Such connections are illegal. The water from these pumps can overload the sewer, causing it to overflow raw sewage into a stream, the street, or someone else's basement.
- ✓ **Inspect the gutters on your house or business to see if the downspout connects to a sewer line.** Such connections are illegal in many communities. **If the gutters are connected to the sewer line, have them disconnected—the runoff water from the roof can contribute to an SSO.**

EVERY YEAR DELAWARE COUNTY RESIDENTS PAY MILLIONS OF DOLLARS TO TREAT RAINWATER IN THE SANITARY SEWER SYSTEMS!

THAT'S TENS OF THOUSANDS OF DOLLARS WASTED EACH WEEK AND IT'S PAID FOR THROUGH YOUR SEWER FEES!



Your sewer lateral is the pipe from your house to the sewer main in your street. You own the sewer lateral under your yard.

Leaky sewer laterals, connected downspouts, and sump pumps allow rainwater to enter the sanitary sewer system.

Once that rainwater mixes with the sewage, it must be treated at the sewage treatment plant.

You are responsible for properly maintaining your sewer lateral to stop rainwater from entering the sanitary sewer system.

A well-maintained lateral protects public health and the environment and can help you save money.

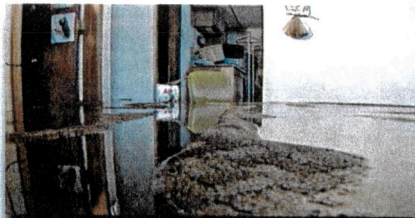
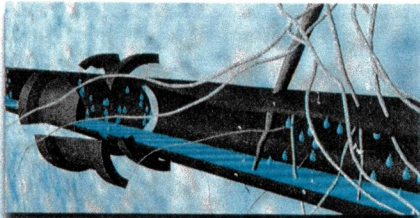
SEWER LATERALS NEED TO BE INSPECTED PERIODICALLY. IF YOU HAVE NOT INSPECTED, REPAIRED, OR REPLACED YOUR LATERAL, IT COULD BE FAILING.

Failing laterals have old-age cracks, loose pipe joints, and tree roots, which let rainwater into the sewer system.

Rainwater also enters the lateral through connected downspouts, basement sump pumps, foundation drains, and driveway drains.

WHEN RAINWATER IS ALLOWED INTO YOUR LATERAL, THE SEWER MAINS CAN OVERLOAD, LEADING TO A BACKUP OF RAW SEWAGE IN BASEMENTS.

Sewage is foul smelling, very difficult to clean up, and it can make your family very sick. It is a nightmare if sewage backs up into a house, damaging furniture, children's toys, irreplaceable family photos, or an entertainment/recreational area.



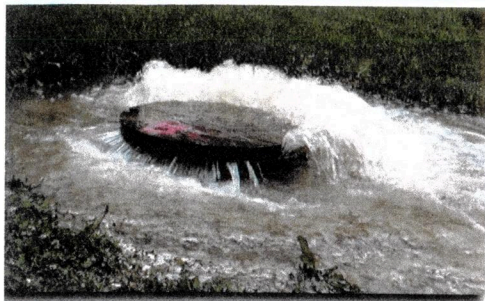
DELCORA
100 East Fifth Street
P.O. Box 999
Chester, PA 19016-0999

**STOP THROWING
MONEY DOWN
THE DRAIN!**



**How to Safeguard your Home,
Community, and Environment**

SEWAGE TREATMENT PLANTS ARE DESIGNED TO TREAT THE WASTEWATER FROM THE HOMES, BUSINESSES, AND INDUSTRIES IN YOUR COMMUNITY. BUT WHEN CONNECTED DOWNSPOUTS, SUMP PUMPS, AND LEAKY LATERALS LET RAINWATER INTO THE SYSTEM, THE EXTRA WATER CAN OVERLOAD THE SEWAGE TREATMENT FACILITY.



If extra water overwhelms the treatment facility, raw sewage may overflow manholes into the streets.

Raw sewage may even be discharged from the treatment facility directly into streams and rivers in your community.

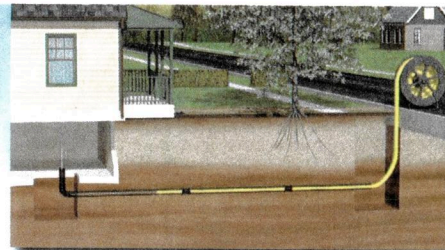
Raw sewage in public areas can make people very sick! And raw sewage in creeks and streams is an environmental disaster!

A QUALIFIED PLUMBER CAN FIND PROBLEMS IN YOUR SEWER LATERAL AND HELP FIND ANY IMPROPER CONNECTIONS USING ONE OF THE FOLLOWING TECHNIQUES:

- **Visual inspection** - A special camera is pushed through your lateral. The plumber can view the lateral's interior on a video screen and see any problems.
- **Dye testing** - A non-toxic dye is dripped into locations around your house, including downspouts and the soil above the lateral. Dye appearing in nearby manholes indicates problems.
- **Smoke testing** - A special, non-toxic smoke is pumped from the sewer main into your lateral and monitored to see where the smoke appears. Smoke escaping from the pipe up through the ground indicates a break in the pipe. Smoke escaping from the downspout indicates an improper connection.

IF A DOWNSPOUT OR SUMP PUMP IS CONNECTED TO YOUR LATERAL, YOU MUST HAVE IT DISCONNECTED.

IF YOUR LATERAL HAS CRACKS, LOOSE PIPE JOINTS, OR TREE ROOTS, YOU MUST HAVE IT REPAIRED OR REPLACED.



YOU CAN HAVE YOUR LATERAL REPAIRED IN SEVERAL WAYS:

- **Open cut excavation** is the traditional method of digging out your lateral for removal and replacement.
- **Slip lining** (pictured left) does not require extensive excavation. A winch pulls a flexible, liner pipe into place inside your existing pipe.



• **Pipe bursting** is like slip lining except a small, metal ram is pulled through your existing pipe. The ram breaks the pipe and pushes the pieces into the soil, pulling a new pipe into place behind it.

• **CIPP (cured-in-place pipe)** involves a felt tube, saturated with glue, being inflated inside your existing damaged pipe. Once the glue has set, the felt tube liner is left in place and the repair is complete.

AS LATERALS AGE WITHOUT BEING INSPECTED OR REPAIRED, THE COST GOES UP TO TREAT RAINWATER AND THE CHANCE INCREASES FOR A SEWAGE BACKUP IN YOUR BASEMENT.

Everyone knows how important it is to maintain your property and home. It is just as important to maintain your sewer lateral even though you cannot see it.

You must inspect your sewer lateral to ensure that you are not contributing to the problem.

The Delaware County Regional Water Quality Control Authority (DELCORA) exists to protect and improve the quality of life of our communities.



For more information, contact:

DELCORA
100 East Fifth Street
P.O. Box 999
Chester, PA 19016-0999

Or

Your Local Sewer Agency
You may find the address on your sewer bill or in the phonebook

OR WATCH A FREE VIDEO ON THE INTERNET: WWW.DELCORA.ORG

Function of Sump Pumps & Downspouts

Rainwater can enter the basement through many sources. The job of a sump pump is to divert the water from inside your basement to a location outside of the house. A sump pump is usually installed in a sump pit which stores the water. When this water reaches a certain level, it triggers the sump pump which pumps the water back outside, away from the house. A downspout's purpose is to direct water from the roof gutters away from the house.

The Problem of Inflow

Inflow is caused by improperly connected foundation (footing) drains, sump pumps, and downspouts. Instead of directing the clear rain water outside and away from the house, it directs the water into the sanitary sewer system. Inflow is a problem because it creates an extra water burden for the sanitary sewer system, and when this system is overloaded, sewage can back up into our streets, buildings, and your home. It also means that our utility bills are higher because we are collectively paying for the unnecessary treatment of clean water!

Rules and Regulations

Inflow is a problem for all of Delaware County's communities and sanitary sewer systems. All municipalities have adopted ordinances which make it illegal to have improper connections to the sanitary sewer. Fees and other enforcement measures can be used to achieve compliance. To avoid fines make sure your sump pumps and downspouts discharge properly.

Homeowners have an impact on preventing or causing the problem of inflow. Your community and neighbors are relying on you to take responsibility for making sure that your connections are not contributing to the problem.

For more information regarding what is being done about inflow in your community, contact your local municipality or sewer author-



**DELAWARE COUNTY REGIONAL
WATER QUALITY CONTROL
AUTHORITY
100 EAST FIFTH STREET
CHESTER, PA 19013
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FARIBAUT COUNTY
SOIL AND WATER CONSERVATION
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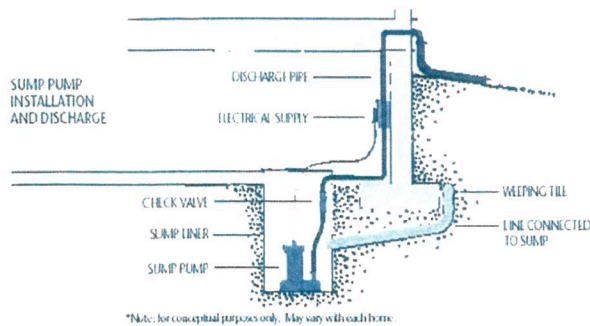
**Disconnecting &
Redirecting Your
Sump Pump &
Downspouts**



In wet weather it only takes a few improperly connected sump pumps to cause a sanitary sewer backup into basements, streets and waterways.

How Do I Know If My Sump Pump Is Improperly Connected?

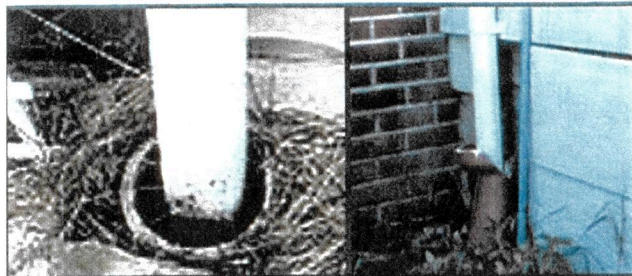
Your sump pump is improperly connected to the sanitary sewer if it is connected to the drain or sink in your basement. Unless you are sure your basement drain is not connected to the sanitary sewer, your sump pump is probably improperly connected.



Proper sump pump discharge connections are to the outside of the house only!

How Do I Know If My Downspout Is Improperly Connected?

If your downspouts disappear into the ground rather than discharging into your yard, they may be connected to the sanitary sewer. While connections to the *storm* sewer are permitted, connections to the *sanitary* sewer must be disconnected and redirected.



Downspouts that look like this could be connected to the sanitary sewer.

Disconnecting Your Sump Pump

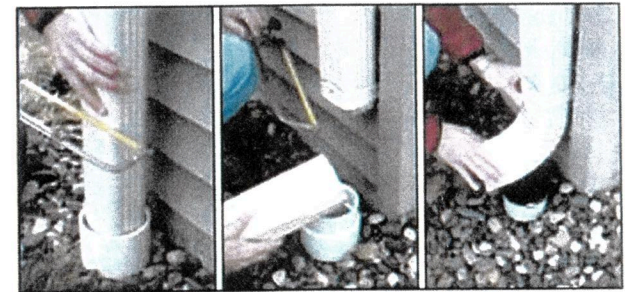
If your sump pump discharges to the sanitary system in any way, the discharge must be re-directed out of the sanitary sewer system. The change could be as simple as directing the discharge outside the house through a hose. If you aren't familiar with the work, contact a plumbing professional, your local municipality, or your sewer authority for more information.

Each household or business that redirects their stormwater out of the sanitary sewer helps solve the problem of sewage backing up into basements, streets, and waterways.

Disconnecting Your Downspout

Disconnecting your downspout from the sanitary sewer is easy to do yourself.

1. Cut the downspout, leaving enough space to insert the elbow.
2. Tightly cap the end of the pipe sticking out of the ground that leads to the sanitary sewer.
3. Attach an elbow to the end of the downspout and use an appropriate extension to direct the water away from your home.



Where Should I Direct the Flow of My Disconnected Sump Pump and Downspout?

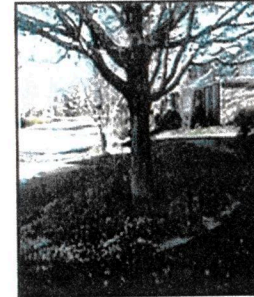
Water should be discharged away from your house or it may seep back into your basement. It should flow to an area where it can seep into the ground or be stored for later use. Direct flow to:



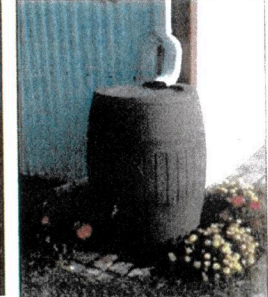
Raingarden



Lawn



Trees



Rain Barrel

Never direct stormwater into a sanitary sewer or onto a neighboring property!